[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1327; Directorate Identifier 2012-NE-47-AD]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Rolls-Royce plc (RR) models RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines. This proposed AD was prompted by low-pressure (LP) compressor blade partial airfoil release events. This proposed AD would require a one-time ultrasonic C-scan inspection of LP compressor blades that had accumulated more than 2,500 flight cycles since new. We are proposing this AD to prevent LP compressor blade airfoil separations, engine damage, and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Rolls-Royce plc, P.O. Box 31, Derby DE24 8BJ, UK; phone: 44 (0) 1332 242424; fax: 44 (0) 1332 249936. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; e-mail: Robert.Green@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2012-1327; Directorate Identifier 2012-NE-47-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all

comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Discussion

The European Aviation Safety Agency (EASA), which is the aviation authority for the Member States of the European Community, has issued EASA AD 2012-0247, dated November 20, 2012, a mandatory continuing airworthiness information (referred to hereinafter as "MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> Low Pressure (LP) compressor partial aerofoil blade release events have occurred in service on RR Trent 700 engines. While primary containment of the released sections has been achieved in each case, some of the releases did exhibit secondary effects that are considered to present a potential hazard. Previously, expeditious actions by RR have mitigated the risks presented by these effects, by removal from service of batches of LP compressor blades. However, some causal factors still exist that are not fully understood. This condition, if not detected and corrected, could lead to LP compressor blade release with possible consequent loss of the engine nose cowl, under cowl fires and forward projection of secondary debris, possibly resulting in damage to the aeroplane and/or injury to persons on the ground.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

RR has issued Non-Modification Service Bulletin (NMSB) RB.211-72-G702, dated May 23, 2011. The actions described in this service information were issued to understand the condition of a sample of operator blades in advance of the introduction of regularly scheduled ultrasonic C-scan shop visit inspections. RR subsequently issued NMSB RB.211-72-G872, Revision 1, dated July 2, 2012. The actions described in this service information are intended to prevent LP compressor blade airfoil release events by conducting in-service ultrasonic C-scan inspections.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by EASA, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require a one-time ultrasonic C-scan inspection of LP compressor blades that had accumulated more than 2,500 flight cycles since new.

Costs of Compliance

We estimate that this proposed AD would affect 56 engines installed on airplanes of U.S. registry. We also estimate that it would take about 38 hours per engine to comply with this proposed AD. The average labor rate is $85 per hour. Required parts cost is $0 per engine. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $180,880.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

Rolls-Royce plc: Docket No. FAA-2012-1327; Directorate Identifier 2012-NE-47-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected Airworthiness Directives (ADs)

None.

(c) Applicability

This AD applies to all Rolls-Royce plc (RR) models RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines.

(d) Reason

This AD was prompted by low-pressure (LP) compressor blade partial airfoil release events. We are issuing this AD to prevent LP compressor blade airfoil separations, engine damage, and damage to the airplane.

(e) Actions and Compliance

Unless already done, do the following actions.

(1) For LP compressor blades that, on the effective date of this AD, have accumulated or exceeded 2,500 flight cycles (FCs) since new, or since inspection in accordance with RR Non-Modification Service Bulletin (NMSB) RB.211-72-G702, dated May 23, 2011, or since in-shop ultrasonic inspection in accordance with the Engine Manual, replace each LP compressor blade (either on-wing or in-shop) with a blade eligible for installation, within 500 FCs after the effective date of this AD.

(2) From the effective date of this AD, do not install on an engine any LP compressor blades that have been removed as required by paragraph (e)(1) of this AD, unless the LP compressor blades have passed the ultrasonic C-scan inspection in accordance with paragraphs 3.C. through 3.F. of the Accomplishment Instructions of RR NMSB RB.211-72-G872, Revision 1, dated July 2, 2012 (or original issue dated April 3, 2012), as applicable.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(g) Related Information

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; e-mail: Robert.Green@faa.gov.

(2) European Aviation Safety Agency, AD 2012-0247, dated November 20, 2012, RR NMSB RB.211-72-G702, dated May 23, 2011, and RR NMSB RB.211-72-G872, dated July 2, 2012 pertain to the subject of this AD.

(3) For service information identified in this AD, contact Rolls-Royce plc, P.O. Box 31, Derby DE24 8BJ, UK; phone: 44 (0) 1332 242424; fax: 44 (0) 1332 249936.

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on January 25, 2013.

Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2013-02077 Filed 01/30/2013 at 8:45 am; Publication Date: 01/31/2013]